

REMARKS

Applicant thanks the Examiner for the detailed review of the application. Reconsideration and allowance are now respectfully requested. Claims 1-25 were pending and were rejected by the above-referenced Office Action. Claim 20 has now been cancelled and claims 1, 10, 14, 16, 19 and 24 have been amended. Claims 1-19 and 21-25 are currently pending. No new matter has been entered.

Rejection of Claims 1, 5-8, 14 and 16 under 35 U.S.C. §103(a)

Claims 1, 5-8, 14 and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,075,783 to Voit (“Voit”). Applicant respectfully traverses this rejection.

Independent claim 1, as amended, calls for a communication system that provides for an optimum connector path between a hard-wired terminal and a mobile data unit, including:

means for locating a serving switch of a wireless communication system that was last in contact with said mobile data unit without attempting to first establish communication with a hard-wired terminal

(emphasis added).

In contrast, Voit discloses a communication system that requires a communication attempt between two terminals or personal computers connected via the Internet before attempting to establish a communication link with a mobile phone. Specifically, as illustrated in Figure 1, the system of Voit discloses a system by which a person at a personal computer (PC) 1 communicates with another person located at another computer 6. However, if the called party is away from their computer 6, the system of Voit provides for the possibility of redirecting the call to another destination, such as a mobile phone.

Referring to Figure 2, Voit emphasizes that the calling process is initiated by the caller at PC 10 entering a Domain Name Address or a telephone number. The PC 10 then transmits this information to a modified Domain Name Server 13. See Voit, 9:7-11. This modified Domain Name Server (DNS) 13 provides a type of conditional processing. Specifically, the system is configured or programmed to query the computer at the called IP address to determine if it is 'live.' This is accomplished by the DNS 13, which sends a query to the destination address identified in the address table lookup. If the destination PC is on or 'live', the PC so notifies the server in response to the query. Then the DNS transmits the IP address of that computer back to the calling equipment, and the calling PC completes the call through the Internet using that IP address. See Voit, 10:15-30.

According to the above process, the system pings PC 18 to see if it is live. If the PC is off, a timer routine times out when there is no response to the query. Alternatively, the PC may be on but respond with a negative answer indicating that the called party is absent. If the PC is not live or returns a negative response, a check is then made to determine if the called person has either a wireline or cellular telephone to which communications can be established. See Voit, 10:33-40.

The above-described conditional processing is considered to provide a "follow-me" type of routing process whereby a call is directed to the current location of the called party, including the possibility of redirecting a call to a mobile phone, if the called party is not available at their computer. See Voit, column 12, lines 5-44, for a further example of this routing process. Based on the above, Voit is seen to disclose a system where it is always presumed that the original intended communication is between two computers on the Internet. Only after the system has confirmed the absence of the called party at the destination computer, by "pinging" the computer, waiting for a response, and either not receiving a response or receiving a negative response, does Voit attempt to forward or redirect the call to another destination, such as a hard-wired or wireless phone. However, unlike Voit, independent claim 1 calls for a communication system that includes means for locating a serving switch of a wireless communication system that was last in contact with said mobile data unit without attempting to first establish communication with a hard-wired terminal. Accordingly, the invention of claim 1 is directed to a system

designed specifically for providing communication between a computer on an alternate network, such as the Internet, and a mobile terminal. In contrast, Voit discloses a system for establishing a call between two computers on a network, with the subsequent possibility of redirecting the call to another destination, such as a mobile telephone, if the intended party is currently not at the computer. Such a routing system requires more processing and is more susceptible to delays during the call setup process.

Claims 5-8 depend on claim 1, and as such, incorporate the unique features of claim 1 that distinguish it from the system of Voit.

Similar to claim 1, independent claim 14 calls for a telephone system for communicating between a hard-wired terminal and a mobile terminal, including the use of a “temporary local directory number to establish communication with said mobile terminal, without attempting to first establish communication with another hard-wired terminal, through use of said Internet based protocol network and a public switch telephone network.” However, unlike current claims 1 and 14, the system of Voit, as discussed above, requires that a communication link first be established between the originating computer and a receiving computer, both of which are hard-wired to the Internet, before any communication is redirected to another possible destination, such as, a mobile phone.

Independent claim 16 calls for a method for providing a connector path between a hard-wired terminal and a mobile terminal, including the step of “communicating with said mobile terminal without attempting to first establish communication with another hard-wired terminal.” In contrast, the system of Voit redirects a communication to a wireless device only after acknowledging that the intended recipient is not available at a computer connected to the Internet.

Rejection of Claims 2, 3, 9 and 15 under 35 U.S.C. §103(a)

Claims 2, 3, 9 and 15 were rejected under 35 U.S.C. §103(a) as being unpatentable over Voit in view of U.S. Patent No. 6,078,575 to Dommetty et al. (“Dommetty”). Applicant respectfully traverses this rejection.

Claims 2, 3, 9 depend on claim 1 while claim 15 depends on claim 14. As such, unlike Voit, these dependent claims call for a communication or telephone system that does not attempt to first establish communication with another hard-wired terminal before establishing communication with a mobile terminal. The reference of Dommety, which is cited merely for its use of a visited location register (VLR), fails to provide for the deficiencies of Voit. Accordingly, this rejection is traversed.

Rejection of Claim 4 under 35 U.S.C. §103(a)

Claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over Voit and Dommety in view of U.S. Patent No. 5,636,209 to Perlman ("Perlman"). Applicant respectfully traverses this rejection.

Claim 4 depends from claim 3, which in turn depends from claim 1. As such, dependent claim 4 incorporates the previously discussed unique features that distinguish claim 1 over both Voit and Dommety. Furthermore, Perlman is cited merely for its use of a plurality of modems, and thus like the reference of Dommety, similarly fails to provide for the deficiencies of Voit. Accordingly, this rejection is traversed.

Rejection of Claims 10, 11 and 17-21 under 35 U.S.C. §103(a)

Claims 10, 11 and 17-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Voit in view of Dommety. Applicant respectfully traverses this rejection.

I. Rejection of Claims 10, 11, 17 and 18

Independent claim 10, as amended, calls for a telephone system wherein:

a communication link is established between said hard-wired terminal and said wireless data unit without first attempting to establish a communication link with another hard-wired terminal.

(emphasis added).

As previously discussed, the system of Voit requires the attempt of establishing a telecommunication link between two hard-wired terminals before a call can be redirected

to another destination. Similarly, Dommety, which was cited for its use of a visited location register (VLR), also fails to disclose such a requirement. Accordingly, independent claim 10, along with its dependent claims 11, 17 and 18, traverse this rejection.

II. Rejection of Claims 19, 20 and 21

Independent claim 19, as amended, calls for a system for communicating between a hard-wired terminal and a wireless data unit, including:

A home location register addressable by said server but not associated with a home mobile switch

(emphasis added).

As previously raised during Applicant's prior response to the Office Action of May 9, 2002, the current state of mobile phone technology requires a home location register (HLR) to be associated with a switching center or mobile switch. (See the second paragraph of page two of the specification, along with Figure 1, items 19 and 23) The switching center interacts with the HLR to provide for call control and processing. The switch also serves as a point-of-access to the public switched telephone network (PSTN). This is the standard in the art.

However, as emphasized in the first full paragraph on page 3 of the specification, due to the unique way that the claimed invention integrates an alternate non-public switched network with a wireless network, the "HLR used by this invention has *no associated switching matrix*." As a result of this, "*all mobile stations are always in a roaming state*." This unique aspect of the present invention is now incorporated into independent claim 19 and, subsequently, dependent claim 21, which call for the present invention to include "a home location register (HLR) addressable by said server [of the alternate non-public switched telephone network] *but not associated with a home mobile switch*."

In contrast to claims 19 and 21, both Voit and Dommetty fail to disclose the use of a home location register (HLR) that is not associated with a home mobile switch. In fact, it can be presumed that Voit actually requires the use of a HLR that *is* associated with a switching matrix as Voit simply discusses the use of a standard cellular or PCS system that includes the use of an “analog or digital telephone of some common type.” See Voit, 10:48. Similarly, Dommetty emphasizes throughout its disclosure the association of location registers with switches. For example, see Figure 9, which illustrates the hierarchically-organized location registers, represented by squares, and their associated switches, represented by circles.

Accordingly, both Voit and Dommetty, which simply disclose the standard in the art of mobile communications, fail to disclose the invention as called for by claims 19 and 21. For the above reasons, Applicant respectfully requests that this rejection be withdrawn.

Rejection of Claims 12 and 13 under 35 U.S.C. §103(a)

Claims 12 and 13 were rejected under 35 U.S.C. §103(a) as being unpatentable over Voit in view of Dommetty and Perlman. Applicant respectfully traverses this rejection.

Claims 12 and 13 both depend from independent claim 10. As previously discussed, neither Voit nor Dommetty disclose a communication system where a communication link is established between a hard-wired terminal and a wireless data unit without first attempting to establish a communication link with another hard-wired terminal. Similarly, Perlman, which was cited simply for its use of a plurality of modems, also fails to disclose any such type of requirement. Accordingly, Applicant respectfully requests that this rejection be withdrawn.

Rejection of Claims 22 and 23 under 35 U.S.C. §103(a)

Claims 22 and 23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Voit in view of Dommetty and Perlman. Applicant respectfully traverses this rejection.

Claims 22 and 23 both depend from independent claim 19. As previously discussed, neither Voit nor Dommetty disclose a communication system that includes the use of a home location register that is addressable by a server but not associated with a home mobile switch. Similarly, Perlman also fails to disclose a communication system that utilizes a HLR that is not associated with a home mobile switch. Accordingly, Applicant respectfully requests that this rejection be withdrawn.

Rejection of Claims 24 and 25 under 35 U.S.C. §103(a)

Claims 24 and 25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Voit in view of Perlman. Applicant respectfully traverses this rejection.

Independent claim 24, as amended, calls for a method of communicating between a hard-wired terminal and a wireless data unit, including the step of:

establishing communication between said alternate non-public switch telephone network and a wireless network, said wireless network including a home location register addressable by said server but not associated with a home mobile switch

(emphasis added).

However, as previously discussed, Voit fails to disclose any form of communication system that utilizes a home location register (HLR) that is not associated with a home mobile switch. Instead, Voit simply relies on the use of a traditional cellular network as represented by the standard in the art. Perlman, cited for its use of a plurality of modems, does not even disclose the use of a wireless network. Accordingly, Applicant respectfully requests that this rejection be withdrawn.

CONCLUSION

All objections and rejections having been addressed, it is respectfully submitted that the present application is in condition for allowance, and a Notice to that effect is earnestly solicited.

Any fees associated with the filing of this paper should be identified in any accompanying transmittal. However, if any additional fees are required, they may be charged to Deposit Account 07-2339.

Respectfully submitted,

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